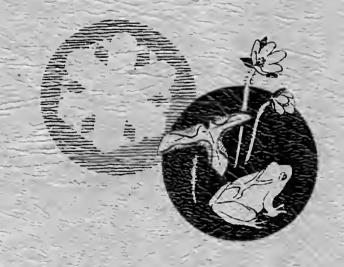
# TRAIL, de Landscape

A PUBLICATION CONCERNED WITH NATURAL HISTORY AND CONSERVATION



Trail & Landscape Vol. 18, No. 2/57-104/March-April 1984

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# The Ottawa Field - Naturalists' Club

- Founded 1879 -

President E. Franklin Pope

Objectives of the Club: To promote the appreciation, preservation and conservation of Canada's natural heritage; to encourage investigation and publish the results of research in all fields of natural history and to diffuse information on these fields as widely as possible; to support and co-operate with organizations engaged in preserving, maintaining or restoring environments of high quality for living things.

Club Publications: THE CANADIAN FIELD-NATURALIST, a quarterly devoted to reporting research in all fields of natural history relevant to Canada; TRAIL & LANDSCAPE, providing articles on the natural history of the Ottawa Valley and on local Club activities five times a year; and THE SHRIKE, a bimonthly newsletter on birowatching in the Ottawa-Hull area, available by separate subscription.

Field Trips, Lectures and other natural history activities are arranged for local members; see "Coming Events" in this issue.

Membership Fees: Individual (yearly) \$17
Family (yearly) \$19
Subscriptions to Trail & Landscape (libraries and institutions) \$17 per year (Volume)

Single copies of recent issues \$3.50 each.

Membership application, correspondence: THE OTTAWA FIELD-NATURALISTS' CLUB Box 3264, Postal Station C Ottawa, Ontario K1Y 4J5 Information: (613) 722-3050

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# Council. Report

#### The Annual General Meeting

The 105th Annual General Meeting, held on January 10 at the National Museum of Natural Sciences, was attended by about 80 people. The number was due, perhaps, to the notice of motion to alter the Club's name, but unfortunately delay in the delivery of the issue of The Canadian Field-Naturalist containing this notice meant, according to the constitution, that action could not be taken. Although the prime intent of the motion is to eliminate the punctuation, as well as proposing to drop "The" and "Club" in the title, limited discussion at the meeting served to show that there are the obvious two viewpoints: "do" and "don't". There was strong feeling against dropping the word "Club". The final treatment of the motion will now await the 106th Annual General Meeting.

The Council's report to the Club was read and accepted.

Several highlights merit emphasis:

- The final report of the Centennial Steering Committee was issued and summarized in Trail & Landscape (19(1): 31-33). Of 24 approved projects, three were not possible, two are still in progress, and the rest were accomplished.

- The Club hosted the 1983 Federation of Ontario Naturalists Annual Meeting with outstanding success. Field trips were considered especially successful. A profit of \$6,127 was split

between the FON and the Alfred Bog Fund.

- The Club was deeply involved in the fight to save Alfred Bog. Expenditure of over \$13,000 was incurred for purchase of land and legal fees for an Ontario Municipal Board hearing. The expense was more than offset by donations, a raffle, and proceeds from the FON meeting. Although the OMB supported agricultural zoning for the bog, the issue is not dead.

- A publications policy was developed from the recommendations of the Ad Hoc Committee on Publications (October 1980 report to the Council). The policy has been published in The Canadian

Field-Naturalist, Volume 97, Number 2.

These are only four items from what was a very active year with a high media profile. The Club maintained its interest in conservation matters across Canada, and the Conservation Committee, for example, raised correspondence or commented upon over two dozen issues from Beaufort Sea environmental assessment to Torbolton Forest management, from Olympic skiing in Alberta to hydro lines in eastern Ontario.

As of September 30, 1983, Club membership of all types

totalled 1,278 (1,246 last year). Of these, 1,185 are in Canada and 816 of these are local. Honorary members total 15; Hue Mac-Kenzie was elected to this rank in 1983.

During the meeting, out-going President Brunton paid tribute to the late Violet Humphreys, who had given over 35 years of assistance and participation to the Club.

Refreshments were enjoyed by a large number of attendees after the film, thanks to Catherine  $0\,{}^{\prime}{}{}$  Keefe and helpers.

#### Club Officers and Members of the Council

The following slate of officers and members of the Council was presented by the Nominating Committee and approved by Club members:

 President
 Frank Pope (829-1281)

 Vice-Presidents
 Bill Arthurs (225-6941)

 Bill Gummer (596-1148)
 Gordon Hamre (728-4984)

 Corresponding Secretary
 Barbara Martin (828-8144)

 Treasurer
 Paul Ward (722-1203)

Other Council Members: Ron Bedford, Dan Brunton (Past President), Barbara Campbell, Bill Cody, Francis Cook, Ellaine Dickson, Stephen Gawn, <u>Jack Gillett</u> (new in September 1983), Chuck Gruchy, Diana Laubitz, <u>Bernie Ladouceur</u>, <u>Lynda Maltby</u>, <u>Art Martell</u>, Philip Martin, Betty Marwood, <u>Patricia Narraway</u>, Ken Taylor and Roger Taylor.

Names of new officers and members are underlined. Our thanks go to the retiring Council members for their help and interest: Paul Catling, Eugene Munroe, Stew Hamill (joined in September 1983) and Tom Hanrahan (joined in March 1983).

At the Council meeting on January 16, Committee chairmen were appointed as follows:

#### Standing Committees

 Awards
 Bill Gummer (596-1148)

 Conservation
 Roger Taylor (731-9270)

 Excursions and Lectures
 Philip Martin (729-3218)

 Finance
 Bill Arthurs (225-6941)

 Membership
 Barbara Campbell (839-3418)

 Publications
 Ron Bedford (733-8826)

#### Other Committees

Birds Bernie Ladouceur (729-9471)
Education and Publicity Ken Taylor (224-3928)
Macoun Diana Laubitz (521-7458)
Nominating Dan Brunton (829-7307)
Executive Frank Pope (829-1281)



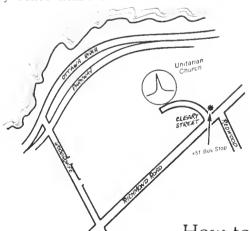
Contribute to another memorable evening by exhibiting your collections, photographic prints and art. Those wishing to do so, please notify the Excursions and Lectures Committee via the Club number (722-3050) before April 14.

Items for display should be brought to the Unitarian Church between 4 and 6 p.m. on May 4th and taken home that evening after the Soirée. Prints and artwork must be mounted for easy hanging. If you have questions or suggestions, contact either Peter Hall (733-0698) or Colin Gaskell (728-7217).

Display your favourite colour and/or black and white photographic prints. There will be prizes awarded for the best prints exhibited by OFNC members. (First prize is an Ellaine Dickson bird carving!)

For the young people attending there will be a nifty prize awarded for each of the three displays submitted by students (up to and including grade 13). Children who are OFNC and/or Macoun Club members are eligible. First prize consists of the National Geographic Society's new Field Guide to the Birds of North America, Guide to Bird Sounds and The Wonder of Birds. Second prize is a backpack, and third prize is a high-quality hand lens.

Bring your "unknowns" to the Soirée; there will be a special table where they can be brought for possible identification by other members.



See the centrefold for complete information on the Soirée.

How to Get to the Soirée

# Macoun Field Club Crisis

Stephen J. Darbyshire

The Macoun Field Club, our junior club, will soon be facing a crisis that threatens to end its 35-year history. The problem is one of leadership.

Over the last few years, the search for a suitable person or persons included appeals within the National Museum of Natural Sciences staff and several announcements in Trail & Landscape. To date, no one has responded to these pleas. For the past four years, I have been helping to run the club, and as each year goes by, I have had less and less assistance. Although I have enjoyed my involvement with the club, I can no longer afford the time requirements, especially as I anticipate having to do all the work in the 1984/85 season. At this point in time, there is no leader for the next season.

Leaders for the Macoun Field Club should be willing to give up their time to meetings on Friday afternoon and/or Saturday mornings through the school year. Also, leaders must have a good knowledge of natural history, and preferably be involved actively in research. I can say from personal experience that it is most desirable to have more than one leader, unless he or she is very dedicated.

I certainly hope that there is some response to this call for help, because without a response the Macoun Field Club will certainly come to an end as of June, 1984. It is time for the people in both sponsoring organizations, The Ottawa Field-Naturalists' Club and the National Museum of Natural Sciences, to decide whether they want the Macoun Field Club to continue, and what form the club will take in the future.

I strongly urge those willing to help to call me as soon as possible. Do not leave it to the last hour.

Please call Stephen Darbyshire at 749-9317 (home) or 996-1665 (work).

#### Trail & Landscape Circulation

Circulation of the January-February issue was as follows: a total of 1121 copies was mailed, 1084 of them to members, subscribing libraries and other institutions in Canada. Thirty-seven copies were sent outside Canada, 32 of them to the United States. The cost of postage for that mailing was \$70.85 (second class) for the 56-page issue.

# Recent Bird Sightings

Frank H. Bell

Spring is probably the most exciting season for watching birds for several reasons: after a long winter it is so good to see a rebirth of nature, birds are in their bright breeding plumage, and they are often bursting forth in song, which is not only beautiful but also an aid in locating them and identifying them. Fall birding may have less appeal to many, but there are some good points about it. Whereas the spring migration is over "before you know it" - it occurs mostly in April and May - the fall migration is roughly from the latter part of August to mid-November. (Of course there are exceptions to these dates, shorebirds being a prime example.) And not only is the fall migration period longer in general, but also the length of time that a particular species is around is generally longer, in part because the adults and young often pass through at different dates. Finally, the post-breeding wandering of birds seems to bring in more rarities in the fall than in other seasons, and this year was no exception.

In November, although the precipitation was 68% above normal, temperatures of almost exactly normal gave us a month of nearly open water and good waterbird watching. But early in December cold north winds and snow arrived, clearing out most of the last migrants and making woodland walking difficult - the month had 88 cm of snow.

November produced all the waterfowl found in the main section of our Ottawa checklist (1979), except for Redhead and Ruddy Duck, plus two of the three very rare birds listed at the end. One of these was the first Harlequin Duck since 1976; it was seen for a short time off Nepean's Stillwater Park on December 4. The other was a female King Eider seen at Shirleys Bay on November 2; there was another "Queen" Eider later in the Remic Rapids area which appeared on December 17 and stayed for a few days, including the Christmas Bird Count, making it the first one ever on the count.

In addition to good numbers of regularly occurring waterfowl species such as Common and Red-breasted Mergansers, there were especially large single-day flocks of a few species: 38 Old-squaws on November 12, 200 Brant on November 5 (and 85 the follow-

ing day), and 60 Common Loons and five Red-throated Loons (not "real" waterfowl) also on November 12. In fact, that November 12 was a day to remember because, in addition to the three species mentioned above, it produced three Black-legged Kittiwakes. This was only the fifth Ottawa record for this species. The Shirleys Bay - Ottawa Beach area was the locale for nearly all of these waterbirds.

In contrast to the waterbirds, there were relatively few hawks of any kind, although there was a late Osprey on November 11 and a Peregrine Falcon on November 24.

As a result of the open November, a good number of shore-birds remained into the month. Twelve species were seen, with an especially late Greater Yellowlegs on the 20th and a Dunlin on the 24th. But the shorebird highlight, and in fact one of the highlights of the period, was the sighting of two Purple Sandpipers at the Munster Sewage Lagoons on November 5 and the four at Shirleys Bay the following day.

In addition to the Kittiwakes already mentioned, there were good numbers of gulls seen, especially for November - ten species in all. The rare Franklin's Gull was spotted on November 8, and one or two Lesser Black-backed Gulls were seen on five days in November, and one on December 1.

As for some of Ottawa's winter specialities, it has been a good early winter for Pine Grosbeaks, not bad for Bohemian Waxwings, but a poor one for three-toed woodpeckers - there have been few Black-backed Woodpeckers and no (Northern) Three-toed Woodpeckers. Winter finches started out normally in early November, but then generally moved on, except for the Pine Grosbeaks already mentioned, and for a large flock of Pine Siskins towards the end of December at a well-known feeder in Blossom Park. Even Evening Grosbeaks have been rather local.

Miscellaneous highlights were a House Finch in Blossom Park in early December, a Carolina Wren from Christmas Day in nearby South Keys, a Pine Warbler in Britannia, and a Brown Thrasher near Carlingwood around (but not on!) the Count day.

Finally, last (because they are being treated elsewhere in this issue) but not least are the most important highlights of the period. A small "invasion" of Northern Gannets occurred in early December for the first local records since 1965. One was seen flying over the west end of the city on November 29. Then, the next day, two were killed near Quyon by persons not familiar with the species and its habits. Finally, on December 3, two were seen flying near Constance Bay.

Of even greater general interest was the invasion into eastern Canada of Great Gray Owls. The first one appeared near Ottawa on about December 8, one was seen by many persons near

Shirleys Bay on December 11, and from then on it was "up". On the Ottawa-Hull Christmas Bird Count on the 18th, 23 were found; an amazing number considering that none had ever been seen before on this count, and since 1976 the previous maximum in any count in all of North America was five individuals! At least for us, this winter surpasses the 1978-1979 famous "winter of the Great Gray Owl", when around 20 were seen in the whole Ottawa region.

The annual Ottawa-Hull Christmas Bird Count was held on December 18. The total number of species was a rather low 70, but several other birds seen near count day were missed. Details can be found in a separate article in this issue and in *The Shrike*, but some highlights, in addition to the King Eider and the Great Gray Owls already mentioned, were a flock of 28 Robins, a Hawk Owl, the third Common Snipe for the count, a total of 195 Hairy Woodpeckers and 63 Northern Cardinals.

#### Literature Cited

The Ottawa Field-Naturalists' Club. 1979. A birder's checklist of Ottawa.

#### Ottawa Banding Group Annual General Meeting

The second Annual General Meeting of the Ottawa Banding Group will be held on Thursday, March 29, at 7:30 p.m., at the National Museum of Natural Sciences, Metcalfe and McLeod Streets, Room 15. Everyone is welcome.

Individual memberships are now being offered at \$10.00 per year. In addition, the Group has now been registered as a non-profit organization. This means that donations to help maintain the banding work carried out at the Innis Point Bird Observatory are tax-deductible, and each will be gratefully acknowledged with a tax receipt.

The mailing address is:

Ottawa Banding Group P.O. Box 3633, Postal Station C Ottawa, Ontario Kly 4J7.

For more information on the Ottawa Banding Group, see Trail & Landscape 17(1): 8-11 (1983).

# Third Annual Christmas Bird Count Roundup 1983-1984 period

Astrid and Bruce Di Labio

High winds, cold temperatures and deep snow combined to make birds hard to find this year. Total individuals were down from last year on all four counts. Species totals were down too on all the counts except Ottawa-Hull, which had one more species than last year. Despite the weather, observer participation remained high and is the one factor which contributed most to the continued success of the counts in the Ottawa area.

Ottawa, Ont. - Hull, Que. (65th annual). This year's count was held on Sunday, December 18. A total of 70 species was recorded by 127 observers, down from last year's 154 observers. The count was again compiled by Bernie Ladouceur. Two new species were recorded, Great Gray Owl (an amazing 23 individuals) and King Eider, bringing the all-time list to 133 species. (See Trail & Landscape 17(2): 63 (1983) for the all-time list.)

Dunrobin, Ont. - Breckenridge, Que. (3rd annual). Good weather conditions played an important role in the success of this count. Held on January 1, a total of 46 species was recorded by 40 observers. No less than 24 Great Horned Owls were recorded during the day, most of them having been heard during early morning owling. Three new species were recorded, Hooded Merganser, Cooper's Hawk and Great Gray Owl, bringing the all-time total to 68 species during the count's three years of existence. The count was compiled by Bruce Di Labio.

Pakenham-Arnprior (69th annual). On December 26, 34 participants found 37 species, including two additional species for the count, Barred Owl and Brown Thrasher. The Barred Owl is a bird to be expected in the area, but it eluded counters until this year. High winds and cold temperatures made finding birds very difficult. Mike Runtz was again the compiler.

Carleton Place (40th annual). This year's count, held on December 31, was compiled by Arnie Simpson. A combination of 37 observers and 30 feeder watchers helped find 41 species. One new species, Brown Thrasher, was recorded at a feeder near Glen Isle. Great Blue Heron and Canada Goose were both recorded for the second time ever.

We are well aware of all the work that goes into organizing a successful Christmas Bird Count, and so we would like to thank all the compilers for their great efforts in making the Ottawa area Christmas bird counts a success.

1983-1984 CHRISTMAS BIRD COUNT ROUNDUP

Species	Ottawa Hull	Dunrobin Breckenridge	Pakenham Arnprior	Carleton Place
Creat Blue Heron	-	-	-	1***
Canada Goose	_	-	_	1***
Mallard	73	12	-	-
Black Duck	158	29	-	-
Ring-necked Duck	1	-	_	_
Lesser Scaup	1 * * *	_	_	_
Common Goldeneye	325		2	1
Barrow's Coldeneye	1	_	_	_
Oldsquaw	3	_	-	_
King Eider	1**	_	_	_
Hooded Merganser	1	1 **	_	_
Common Merganser	64	_	-	12
Northern Goshawk	4	4	4	1
Sharp-shinned Hawk	2***	2*	2***	1
Cooper's Hawk	1	3**	2***	1
Red-tailed Hawk	ī	ĩ	1	_
large falcon species	ĩ	_	_	_
American Kestrel	14	8	1	1
Ruffed Crouse	36	26	16	28
Ring-necked Pheasant	4	-	-	-
Gray Partridge	214	61*	78*	6
Common Snipe	1***	-	-	-
Glaucous Gull	21	-	-	-
Iceland Cull	3	-	-	-
Great Black-backed Cull	7	-	-	-
Herring Cull	34	-	~	-
Ring-billed Gull	1	***	-	-
Rock Dove	3958	517	288	366
Mourning Dove	55*	15*	7	9
Eastern Screech Owl	1	-	-	-
Great-horned Owl	14	24*	1	3
Snowy Ow1	-	2*	1	-
Hawk Owl	1	-	-	-
Barred Owl	5	1	1**	1 * * *
Creat Cray Owl	23**	5**	-	-
Pileated Woodpecker	9	15*	7	4
Hairy Woodpecker	195	134*	38	39
Downy Woodpecker	177	89*	51	50
Black-backed Woodpecker	3	3	-	-
Horned Lark	-	30	-	-
Gray Jay	1	-	_	_
Blue Jay	273	325*	181	267
Northern Raven	5	21	8	-
American Crow	1519*	27	37	34
Black-capped Chickadee	2080	1084	565	648
Boreal Chickadee	2	2	-	
White-breasted Nuthatch	170	91	49	41
Red-breasted Nuthatch	14	3	_	1
Brown Creeper	2.2	21	2	5

<sup>\*</sup> record high
\*\* new species for the count (therefore also record high for that species)
\*\*\* ties record high.

1983-1984 CHRISTMAS BIRD COUNT ROUNDUP, continued

Species	Ottawa Hull	Dunrobin Breckenridge	Pakenham Arnprior	Carleton Place
Northern Mockingbird	2	-	1 4 4	144
Brown Thrasher	_	-	1**	1**
American Robin	35*	<del>-</del>	-	~
Golden-crowned Kinglet	6	4	3	2
Bohemian Waxwing	508	1	57	882*
Cedar Waxwing	3	-	<del>-</del>	3
Northern Shrike	12	12*	6*	2
European Starling	3418	223	185	57
Yellow-rumped Warbler	1	-	-	-
House Sparrow	3087	809	1144	359
Red-winged Blackbird	7	-	-	-
Common Grackle	1	1	1	-
Brown-headed Cowbird	2	-	6	-
Northern Cardinal	65*	-	6***	8***
Evening Grosbeak	1295	721	705	604
Purple Finch	3	-	-	1
Pine Grosbeak	416	126	38	29
Common Redpoll	13	88	_	1
Pine Siskin	24	17*	_	3
American Goldfinch	301	307*	12	48
Red Crossbill	-	1***	_	-
White-winged Crossbill	_	2	_	_
Dark-eyed Junco	36***	3	1	20***
Tree Sparrow	146	47	36	66
White-crowned Sparrow	1	-	_	-
White-throated Sparrow	15	-	_	1
Swamp Sparrow	1	-	-	-
Song Sparrow	16	1	_	-
Snow Bunting	158	918	376	121
Total Individuals	15,652	5,837	3,899	3,741
Total Species	70	46	37	41

SUMMARY: TOTALS FOR THE LAST THREE YEARS

	1981-1982	1982-1983	1983-1984
Total Individuals	46,543	41,675	29,129
Total Species	81	77	78

<sup>\*</sup> record high
\*\* new species for the count (therefore also record high for that species)
\*\*\* ties record high.

## Recent Northern Gannet Records for Ontario

Bruce M. Di Labio

During a five-day period from November 29 to December 3, 1983, a total of five Northern Gannet observations were made in the vicinity of Ottawa\*. The first report was by Jim Harris on November 29 when he saw an immature bird flying northwest over Ottawa's west end. On November 30, two immature gannets were found grounded in slightly different locations, both about six km northeast of Quyon, Quebec. One was in a hardwood forest, the other in a field. Both of these birds were collected by local residents and donated to the National Museum of Natural Sciences. On December 3, while birding near Constance Bay, I observed two immature gannets flying over the Ottawa River heading east (downriver).

Therefore, during this period, at least four, and probably five, Northern Gannets were in the Ottawa area. All were first year birds. Young Gannets are known to wander inland in the fall, and there are several records for Ontario to bear this out; however, the number of birds involved in this most recent series of records leads one to suspect some other cause than just some young gannets that had lost their way. A check with the weather office produced a possible explanation. A weather disturbance with fairly strong winds tracked up the Atlantic coast and was centered in the Gulf of St. Lawrence a few days prior to the first gannet being observed on November 29. Such winds probably funnelled up the St. Lawrence River valley and may have carried some young gannets along.

There are six previous records for Ottawa; all of immature birds and all in the fall. The first is from Shirleys Bay on October 13, 1909, a bird collected by J.H. Slack. On November 21, 1923, C.H. Young observed one flying over Ottawa. In Richmond one was taken from a flock of domestic geese on October 15, 1924. Exactly five years later, on October 15, 1929, one was found dead in Aylmer. Another was found dead about ten years later, on October 20, 1939, in Ottawa. Finally, on December 4, 1965, one was found on a road unable to fly, at South March (near Kanata). All but one of the specimens collected in or near Ottawa are located in the National Museum of Natural Sciences collection; the location of the specimen from Aylmer is unknown.

I would like to thank Donna Naughton for taking the photograph (opposite). Richard Blacquiere and Louise Damant assisted in preparing the manuscript.

<sup>\*</sup>Within the 50-km radius circle centered on the Peace Tower.



One of the Northern Gannet specimens from Quyon before being made into a study skin.

#### Our Heritage of Birds - Peterborough County in the Kawarthas

By Doug Sadler. 1983. Peterborough Field Naturalists' Orchid Press. 190 pp. \$7.95.

The author, a long-time birder, has crafted a very useful tool for bird watchers in the Peterborough area. This is also a helpful book for Ottawa residents as the two regions are not dissimilar, or, as some would say, they are the same but different: the latitude and environment are about the same, although Peterborough has a rather milder climate and has remained more coniferous than the present Ottawa Valley.

This pocket-sized, soft-covered book is not another field guide for the identification of birds by their appearance or sound, but a careful compilation, covering some 300 species, of sightings including migration dates from the earliest in spring to the latest in autumn. The local records over many years have been used and thus meticulous attention is given to migration. It is interesting to compare some of the notes on nesting with the maps of breeding distribution in Godfrey's The Birds of Canada (1966). There is a complete chart showing movement, and abundance or otherwise, throughout the seasons called "The Year at a Glance". For many species there are also worthwhile comments on behaviour, habitat and frequency.

The Peterborough Field Naturalists, who have published this book to celebrate the Province's Bicentennial, and Doug Sadler are entitled to warm fraternal congratulations for their enterprise in producing a first-class contribution to birding.

# A Recent Specimen Record of Fulvous Whistling Duck for Ontario

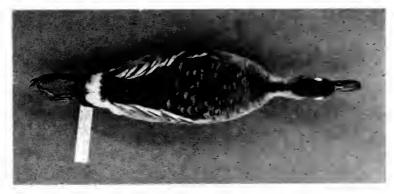
Bruce M. Di Labio and Richard Blacquiere

On October 22, 1983, Mr. Ted Curtis, while hunting at Sawlog Bay on the Lower Rideau Lake, shot an unusual duck which had flown into his decoys with two drake Mallards. After consulting F.H. Kortright's The Ducks, Geese and Swans of North America (1943), he concluded it was a Fulvous Whistling Duck (Dendrocygna bicolor). Knowing it to be far north of its normal range and probably a very unusual bird for Ontario, he contacted one of us (BMD) to confirm the identification. Upon request, Mr. Curtis donated the specimen to the National Museum of Natural Sciences.

The bird (No. 75124) proved to be an adult female in fresh plumage. There were no calluses on the feet indicating that it was not an escapee. It measured 464 mm in length and weighed 718.7 grams. It had very little fat.

There are two other specimens for Ontario, both at the Royal Ontario Museum. This most recent record of Fulvous Whistling Duck is the ninth for Ontario and the first for eastern Ontario. The distribution of records by month is as follows: three in May, one in June, two in August, and one each in October, November and December. The May, June and December records are of single birds, while the rest are of small groups (two or more birds).

We would like to thank Mr. Ted Curtis for donating this valuable specimen to the Museum and Louise Damant for typing the manuscript.



The female Fulvous Whistling Duck from Sawlog Bay prepared as a study skin. Note the black line down the back of the neck, and the white flank stripes and upper tail coverts.

## A Report on the Nova Scotia Herbicide Case

Roger Taylor

On Thursday, September 15, 1983, a decision was handed down in a Nova Scotia court that sent shock waves throughout the Canadian ecological community. The case concerned 15 Cape Breton landowners who opposed the spraying of neighbouring forest lands with potentially toxic herbicides. Not only did the judge, Justice Merlin Nunn, rule against the plaintiffs, but he also awarded costs and damages against them, leaving them faced with a potential bill of \$250,000 to \$500,000.

After the initial shock of hearing of this decision, I suspect that many people, while feeling sympathetic, asked themselves why the plaintiffs did not protect themselves by incorporation, why did more than one landowner expose himself or herself to the risk of bankruptcy, and was this possibly a frivolous and irresponsible action on the part of the plaintiffs. With a view to getting answers to these questions, I and three other members of the Conservation Committee attended a hastily organized meeting at St. Paul University on November 30, the purpose of which was to provide more information about the case and to raise funds to assist the plaintiffs.

The speaker was Vicky Palmer, one of the 15 plaintiffs. She was introduced by Senator Eugene Forsey, who made it very clear that he supported and admired Mrs. Palmer. We were then treated to a calm and factual summary of the Herbicide Case and the trial without any of the emotional rhetoric one might have expected. Briefly, Nova Scotia Forest Industries (NSFI), a Swedish company, had planted coniferous trees over a large area in Cape Breton. They wished to prevent them from being crowded out by deciduous trees and, rather than weed them manually, they proposed to spray the area with a herbicide similar to the infamous Agent Orange used as a defoliant in Viet Nam. principal ingredients in the herbicide were 2,4-D and 2,4,5-T. The problem is that 2,4,5-T inevitably contains toxic contaminants, the most infamous of which is commonly known as TCDD or dioxin. TCDD is generally believed to be carcinogenic, possibly over a 20-year period, but it is difficult to get full scientific agreement on its effects. By the way, the use of 2,4,5-T is banned in Ontario.

The 15 plaintiffs all own and live on land adjacent to and downhill from the proposed spray area. They were concerned about possible contamination of their water supplies. If they had incorporated themselves, they would have had no status.

Also, class action status was denied. By Nova Scotia law, they were required to provide a written promise that they would pay costs if they lost. This requirement is designed to prevent frivolous actions from taking place. When notices appeared in the newspapers announcing the issuance of permits to spray land, they had only one week to decide what to do.

Initially, the 15 landowners won a six-day injunction hearing which, one would think, demonstrated that theirs was not a frivolous objection; nevertheless, they still had to agree to pay costs if they lost. The case was prepared over the winter of 1982-83, and the trial took place in May for about 30 days. It featured massive controversy among scientists about the potential toxic effects of the herbicide. Also, court testimony cited 19 flagrant violations of regulations by NSFI in a three-day period. While the decision was awaited, permits were issued for all areas where an injunction had not been granted. Hence a landowner who wished to escape the herbicide effects had to be identified as a plaintiff.

In his decision, Mr. Justice Nunn stated that the plaintiffs had not proven the chemicals were unsafe when used according to regulations. He then exercised his prerogative to award costs without discussion of whether or not the action was in the public interest. The decision was based on the judge's personal reading of the evidence and, as Mrs. Palmer explained, this made an appeal almost impossible. To overturn this decision, the appeal court would have to discredit the judge.

During the discussion period of the meeting, Mrs. Palmer apologized for the probable effect this case will have on environmental actions as it will set a very bad precedent, not only in Nova Scotia but also all across Canada. However, I believe that no member of the audience felt that she should apologize at all. The feeling was that she and her neighbours had to fight for what they believed was right. She also commented that the judge really made a serious effort to understand the scientific testimony and jargon that he was exposed to throughout the She doubted that she had ever seen anyone work as hard as he did over that 30-day period. The problem was that he displayed a naive view of a scientist and the way in which such a person worked. He strongly favoured that testimony which was presented in an unemotional, detached and presumably objective In practice, any scientist knows that a colleague who presents his or her work unemotionally is either incompetent or totally bored with it. Towards the end of the meeting, Mayor Marion Dewar arrived and apologized for being so late. She also expressed her support for Vicky Palmer and her fellow plaintiffs.

At the end of the meeting, Mrs. Palmer said that the decision almost certainly would not be appealed because of the very small chance of success. She also doubted that any of them would be forced into bankruptcy by NSFI because of the enormous

backlash of public opinion that would result. Subsequent events proved her correct on both counts. Recently, a newspaper article reported that the plaintiffs had settled out of court with NSFI. According to the article, it was agreed that the Herbicide Fund, consisting of money raised to support the plaintiffs, would be used to pay off their own legal costs. The balance of about \$10,000 would be turned over to NSFI, who would match it with an equal amount to be used to fund a scholarship for a forestry student.

We may complain about how things are run in Ontario, but clearly the system is more heavily stacked against the little guy in Nova Scotia. If you feel concerned about the continued use of dioxin in the Canadian environment, you should write to the Honourable Charles Caccia, Minister of the Environment, House of Commons, Ottawa. Perhaps you could also write to Premier John Buchannan, Province House, Halifax, and ask him why he would prefer to dump potentially toxic pollutants into Nova Scotia waters rather than help solve his unemployment problems by using manual labour to do the job safely.

### Spring in Ottawa

There are places where spring is gentle; flowers and poesy. Not Ottawa. Here spring comes bruising up the valley, sweeping snow from the Gatineau, revealing fall's burnt remains. Here ice melts on flattened fields. asphalt cracks, and muddy high-heeled boots tap staccato sidewalk rhythms. Beside the parkway, the cliffs of layered ice melt slowly, granite reminders of winters still ahead. Ice breaks under Bytown Bridge and hammers ring on icebound paths. The palette of the poet who dares to write of spring in Ottawa is purple, gray and brown. The green is all in the heart.

Linda Jeays

## Etymology of the Teasel

Ross Anderson

A trip to the Bay of Quinte last fall produced a winter wildflower so dramatic that it hangs over the mantel in the place of the usual crossed swords and family crest. The flower is a teasel, and curiosity prompts me to enquire whether Trail & Landscape readers have found teasel around Ottawa.

According to botanical texts, teasels are alien to North America. They were brought here from Europe, presumably by weavers or millers, for decoration or, more likely, for the practical purpose of manufacturing woollen cloth. The verb "to tease", according to Oxford, means "to comb the surface of cloth, after weaving, with teasels, ... so as to form a nap".

There are two species of teasels identified in most texts. One of these, Fuller's or Draper's Teasel (Dipsacus fullonum), may be found around the sites of old mills. No doubt this plant did not adapt to the open countryside for it is not widespread. This teasel has burr-like hooks at the end of each spine which makes it good for teasing cloth after it has been woven.

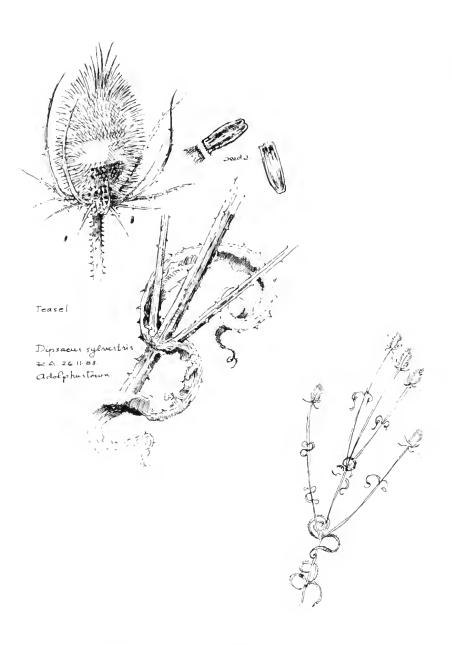
The second species, Wild, Common or Card Teasel (*D. sylvestris*), has spread through much of temperate North America. This teasel, the one from the Bay of Quinte, has straight spines adapted to the carding of wool, a process which takes place after raw wool has first been washed to align the strands to make it ready for spinning prior to weaving.

Perhaps no one today is using either teasel for any practical purpose whatsoever. Perhaps words like "carding" and "teasing" are about to pass into the realm of archaic terms whose origin is lost and usefulness is forgotten. Meanwhile, I wonder if either of these teasels can be found around Ottawa, and, if so, were they ever used here for the purpose described?

If you have a reply to either question, please jot it down and send it to Trail & Landscape in care of Joyce Reddoch, Editor, at the address shown on page 57. Replies will be reported in a subsequent issue.

\* \* \*

Fuller's Teasel is used at Upper Canada Village to raise the nap on blankets produced in the Asselstine Factory there. Common Teasel is listed as "Rare, Gatineau and Carleton Counties" in Checklist of Vascular Plants of the Ottawa-Hull Region, Canada by J.M. Gillett and D.J. White (1979). There do not appear to be any recent records east of Kingston. JMR



Teasel, Dipsacus sylvestris

Most commonly found as a decoration in collections of ornamental dried flowers, the teasel originally served a very practical purpose, to "tease" the surface of woven cloth. The scientific name is from dipsa, Greek meaning "thirst "because birds find water where the leaves unite around the stem.

## One of Life's Little Mysteries Solved

#### Jack Holliday

For many years, the Flowering Plum (Prunus triloba 'Plena') was a mound of pink every spring, but these last three springs the flowers have been sparse. There is no obvious reason why it doesn't bloom. The summer growth is luxuriant and we'd had mild winters. I had thought that perhaps the pruning which I did to keep it under control affected the process of manufacturing the flowering buds, and so last summer I didn't prune it very much.

After the leaves had fallen, I could see that the shrub attracted a moderate number of birds. One morning, I noticed three small birds in the bare branches of the top of the shrub. A close look through the window confirmed identification as the common House Sparrow, an immature male and two young females. The male pecked from time to time at the branches near him. One of the females also pecked desultorily around. I found this strange as there are few insects active in November.

The apple tree nearby once had an infestation of Oyster Shell Scale, which Pine Siskins fed on in the winter. My first thought then was that the Flowering Plum was infested with scale. I made a mental note to check it out, and one afternoon I went out and examined the shrub but found no scale and no insect eggs. What then were the sparrows pecking? The flower buds? Sure enough, a close examination indicated some of the "corky" spurs had clusters of flower buds and on others the flower buds were missing. I can recollect sparrows pecking on other occasions at the branches and idly wondered "at what". It seems apparent then that the reason there are few flowers is because there are few buds, the buds having been eaten.

I have observed Evening Grosbeaks eating elm buds in April, just as the buds started to swell. Elm buds seem to be a large part of their diet in the spring, as I have noticed buds being eaten for three or more successive days and for several spring seasons.

I would not have thought, however, that House Sparrows ate buds also, thinking of them as seed-eaters primarily and insecteaters when feeding young birds.

I suppose that if I want the lovely flowers, I must put a net over the shrub. Such a bother. I'll probably leave it to provide "salad" for the sparrows.

# More of Those Uninvited Guests in the Garden

#### Bill Gummer

In last summer's Trail & Landscape, Gummer and Bell (1983) presented a list of about 56 species of plants that were growing in their gardens without intent on the part of the gardeners. Some were identified only as to genus, hence the uncertainty of the total number. A follow-up in 1983, and a joining of forces with Clarey Frankton, has produced a surprising list of about 90 species not encountered or not identified last year. Again, some are not positively identified by species name.

The list that follows tallies the new species and shows by initials where they were found (B = Bell, F = Frankton, and G = Gummer). The Frankton and Gummer lots are not far apart in westend Ottawa, but there are large differences in weed populations.

There are a few points to observe in explanation. First, the presence of trees as weeds is recognized, and a dozen species of small and large trees appear in the list. Second, a number of F species relate to records of previous years, not recently; they are included because they help illustrate the variety that may be expected. They are marked with an asterisk (\*). Third, we now have three creeping euphorbeas, including E. supina (in last year's list), which turns out to be very common in areas seen by F and G. Fourth, some of last year's unidentified species now appear in the list with proper names. Finally, half the species in this list, which includes many not usually considered weeds, are native to North America.

#### The 1983 list:

Equisetum arvense	В
Athyrium felix-femina	F
Picea glauca	G
Setaria verticillata	F
Digitaria sanguinalis	F
Lolium perenne	F
Festuca sp.	В
Cyperus esculentus	В
Sisyrinchium sp.	G
Epipactis helleborine	F
Quercus macrocarpa	G
Ulmus americana	F,G
U. pumila	G
	Athyrium felix-femina Picea glauca Setaria verticillata Digitaria sanguinalis Lolium perenne Festuca sp. Cyperus esculentus Sisyrinchium sp. Epipactis helleborine Quercus macrocarpa Ulmus americana

*Buckwheat Water-pepper Green Smartweed Sheep Sorrel Curled Dock Oak-leaved Goosefoot Goosefoot	Fagopyrum esculentum Polygonum hydropiper P. scabrum Rumex acetosella R. crispus Chenopodium glaucum C. murale	F F F F F
Orache Night-flowering Catchfly Lesser Stitchwort Thyme-leaved Euphorbea Etched-seed Euphorbea Garlic Mustard Wormseed Mustard Wild Mustard Hedge Mustard Sedum	Atriplex patula Silene noctiflora Stellaria graminea Euphorbea serpyllifolia E. glyptosperma Alliaria officinalis Erysimum cheiranthoides Sinapis arvensis Sisymbrium officinale Sedum sp.	F F G,F G,F F F,F
Mountain Ash Spiraea Rose Raspberry Strawberry Yellow Avens White Avens Geum Black Medic Sweet Clover	Sorbus sp. Spiraea sp. Rosa sp. Rubus strigosus Fragaria virginiana Geum aleppicum G. canadense G. urbanum Medicago lupulina (1) Melilotus sp.	G F F G,F G,F F G,F
Alsike Clover Birdfoot Trefoil Yellow Wood Sorrel Staghorn Sumac Poison Ivy Manitoba Maple Silver Maple Norway Maple Sugar Maple European Buckthorn	Trifolium hybridum Lotus corniculatus Oxalis dillenii Rhus typhina R. radicans (2) Acer segundo A. saccharinum A. planatoides A. saccharum Rhamnus frangula (3)	F F G G G G G
Common Buckthorn Riverbank Grape Johnny-jump-up Northern Willowherb Common Evening Primrose Cheeses Wild Carrot Field Bindweed Hedge Bindweed Ash	R. cathartica Vitis riparia (4) Viola tricolor (5) Epilobium glandulosum Oenothera biennis Malva neglecta Daucus carota Convolvulus arvensis C. sepium Fraxinus sp.	F G,F F,F G,F F,F F,F

Swallowwort Blue Vervain Motherwort American Nightshade *Foxglove Beardtongue Bedstraw Wild Potato Peach-leaved Campanula Yellow Goatsbeard Goatsbeard	Cynanchum medium Verbena hastata Leonurus cardiaca Solanum americanum Penstemon digitalis Galium sp. Thladiantha dubia Campanula persica Tragopogon pratensis T. dubius	F G,F F F G,F F G,F
Wild Lettuce Field Sowthistle Spiny-leaved Sowthistle Common Sowthistle King Devil Mouse-ear Hawkweed Hawkweed *False Ragweed Clotbur Burdock	Lactuca canadensis Sonchus arvensis S. asper S. oleraceus Hieracium florentinum H. pilosella Hieracium sp. Iva xanthifolia Xanthium strumarium Arctium minus	F F F F F F G,F
Low Cudweed Hairy Galinsoga Pineapple Weed Yarrow Canada Goldenrod Lance-leaved Goldenrod Goldenrod Daisy Fleabane Common Fleabane Heart-leaved Aster	Gnaphalium uliginosum Galinsoga ciliata Matricaria matricarioides Achillea millefolium Solidago canadensis S. graminifolia Solidago sp. Erigeron annuus E. philadelphicus Aster cordifolius	G,F F,F F,F G,F G,F
New England Aster Calico Aster	A. nova-angliae (5) A. lateriflorus	F F

Notes: (1) This is the "Clover (yellow)" of 1982;

(2) Poison Ivy has appeared twice, once in a load of soil, and, in 1982, fortuitously;

(3) this species replaces *R. cathartica* of 1982, but *R. cathartica* reappears among F's plants;

(4) this is the "Grape" of 1982;

(5) plants of these species flourish intentionally in the G garden.

#### Literature Cited

Gummer, B. and F. Bell. 1983. How many uninvited plants in your garden? Trail & Landscape 17(3): 179-181.

## Ottawa Regional Science Fair

Ken Taylor

Each year The Ottawa Field-Naturalists' Club presents special awards to deserving life science exhibitors at the Ottawa Regional Science Fair. At this fair, Ottawa area students in grades 7 to 13 demonstrate their ingenuity with projects in the areas of life sciences, physical sciences and engineering. The National Museum of Science and Technology was the site of the 22nd annual fair, held April 8, 9 and 10, 1983.

The OFNC first prize of \$60. was awarded to Shalini Tissaar-atchy and Amanda Tower of Immaculata High School for their exhibit showing the effects of hormones and light on eggplant cultures. Shalini and Amanda were also chosen by judges of the Regional Science Fair to attend the Canada-wide Science Fair in Saskatoon, where they won the Communications Award for their presentation. Way to go, Shalini and Amanda!

Second prize and \$50. went to Warren Layberry of Nepean High School for his interesting exhibit about aquatic microscopy. Andrea McDonald and Pat Corkery of Immaculata High School captured third prize and \$40. for their experiments on the effect of burning on the growth of grass.

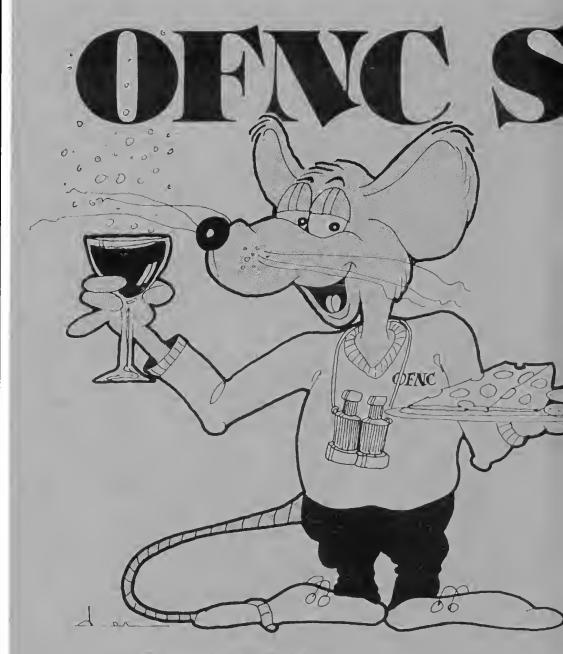
Each award winner received a free one-year membership in The Ottawa Field-Naturalists' Club as well as the cash prizes.

Jack Gillett and Fred Schueler kindly volunteered to serve as special award judges at the fair. Thank you, Jack and Fred, for a good job.

The Science Fair is always interesting and informative, and it affords a great opportunity for budding young scientists to "show their stuff". It really is an event worthy of your support. Why don't you plan to attend the next fair this spring, and take your whole family.

The 1984 Ottawa Regional Science Fair will take place at the National Museum of Science and Technology on St. Laurent Boulevard on April 6, 7 and 8.





Place: Unitarian Church Hall

30 Cleary Street (See map on page 60.)

#51 bus stops at Redwood Ave. and Richmond Rd.

**Reservations:** 

To order tickets, fill in the order form and send it along with \$7.00 (\$3.50 for students under 18) per ticket before April 13 to:

The Ottawa Field-Naturalists' Club c/o Ellaine Dickson
2037 Honeywell Avenue
Ottawa, Ontario
K2A 0P7

# dirée

The Excursions and Lectures Committee will have a dance starting about 11 p.m. after the Soirée. All are welcome to stay and join in.

Friday May 4, 1984

7:30 p.m.

# Wine & Cheese Party

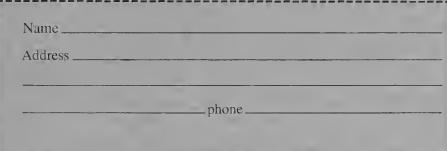
- selection of wines
- non-alcoholic punch
- cheese and crackers
- fruit
- tea and coffee

# Natural History Exhibits

- Art
- Photography
- Collections and Memorabilia

Those wishing to contribute an exhibit please refer to page 60 for details.

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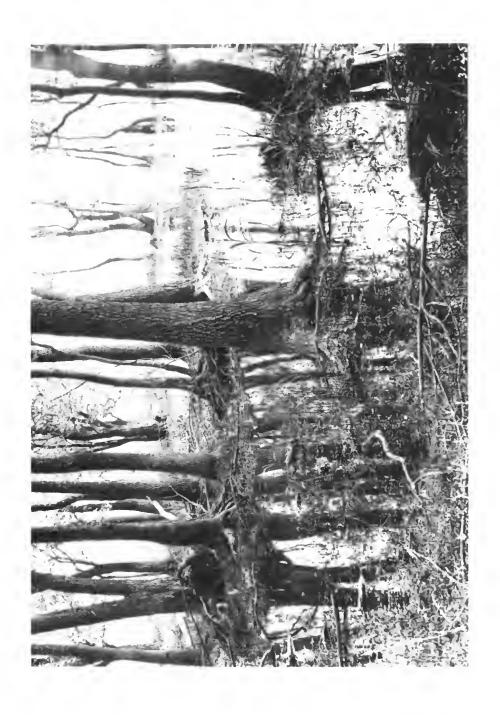


Please send me \_\_\_\_\_\_tickets to the OFNC Annual Soirée at \$7.00 (\$3.50 for students under 18) per person. Enclosed please find my cheque or money order for

\$.....







Spring at Britannia 1913. Public Archives Canada PA 10498

# Federation of Ontario Naturalists Report Roger Taylor

The 1984 FON Conference will be hosted by the Kitchener-Waterloo Field Naturalists. It will take place May 25-27 at the University of Waterloo. The key-note speaker will be Chandler Robbins, co-author of the popular field guide, newly revised, Birds of North America, published by Golden Press. The registration fee will be \$30.00, and the organizers tell us that, even for single accommodation, the total cost of registration, accommodation, meals including the banquet, and field trips will amount to less than \$100. As in Ottawa last year, the field trip excursions will be principally by bus with the cost being covered by the registration fee. It sounds like a good bargain, so mark it on the calendar and wait for further details.

A couple of important developments occurred at the recent FON Board meeting held on December 3. The first concerns the presentation of a discussion paper on the relationship between the FON and the federated clubs. This paper contained several ideas designed to strengthen the bonds between the umbrella organization (FON) and its constituents (the clubs). It is proposed that the FON should increase the services available to the federated clubs, including group public liability insurance coverage. (The OFNC presumably could save the \$200 or so that it pays for its own policy.) Also included in the proposal is the still contentious club federation fee of \$1.00 per local membership payable annually to the FON. But the sweetener is the proposal that the FON pay a federated club \$3.00 annually for each club member who is also a FON member, so that if more than one-third of a club's members are FON members, the club actually starts making money on the deal. These are just proposals, and there will be much discussion and possibly many changes before the discussion paper becomes policy. What is clear from this paper and from the ensuing comments at the Board meeting is that there is a genuine movement to strengthen the ties between the FON and the clubs, and it is coming from both ends.

The other important development at the Board meeting concerns the report of the Nature Reserves Committee. The report summarized the present status of the existing seven reserves. Then it strongly advocated the purchase of further properties and put forward two specific proposals: an expansion of the existing Petrel Point reserve on the Bruce Peninsula and acquisition of the Stone Road Prairie alvar on Pelee Island in Lake Erie south of Point Pelee National Park. It was also stated

that a property should be acquired in eastern Ontario. The two proposals were debated rather heavily, but fortunately, in the view of the three Ottawa-based directors, the acquisitionists carried the day.

The Petrel Point property is about 21 acres (8 ha) in size and consists of wet fen similar to the existing reserve. It will cost \$25,000 to buy, financed by a two-year loan from the Ontario Heritage Foundation at 5% below the prime interest rate. There should be no problem in extending the loan for another two years. The Stone Road Prairie, a 106 acre (42 ha) inland area on Pelee Island, is currently owned by a developer, who appears willing to sell at a price near \$500/acre. It is considered to be one of the most significant unprotected natural areas in Canada. The Board authorized the FON Executive to move quickly on this property if suitable financing can be found. (The Nature Conservancy is one possible source of funds.)

So, if you would like to help the FON to acquire these two important properties, send your donation to the FON, 355 Lesmill Road, Don Mills, Ontario M3B 2W8. A tax-deductible receipt will be issued.

### Botany Group Talks

The following talks will take place in Activity Room 15 of the National Museum of Natural Sciences, Metcalfe and McLeod Streets, at  $8:00~\rm p.m.$ 

Tuesday 6 March PLANTS OF THE OTTAWA DISTRICT, AN HISTORICAL APPROACH Speaker: Bill Dore

What did the early explorers record? The decline of some species, the encroachment of others - a different look at our area will be given. Bill Dore is a veteran Ottawa botanist with a special interest in grasses and the history of botany. He is author of Grasses of the Ottawa District and co-author of Grasses of Ontario

Tuesday 3 April GRASSES OF THE OTTAWA AREA Speaker: Jack Gillett

This talk will provide a basis for the spring and summer field trips and an opportunity for new and old members to join the group. Jack is Curator Emeritus of the Museum's Botany Division and is coauthor of Checklist of Vascular Plants of the Ottawa-Hull Region, Canada.

Tuesday 1 May To be decided.

# Water Babies

## Larval Fishes of Ottawa and Vicinity

Part I. Distribution and Phenology of Baby Fish in Lakes and Ponds

Daniel J. Faber
National Museum of Natural Sciences
Ottawa

Tall oaks from little acorns grow
David Everett (1791)

Many different kinds of water babies abound in lakes and ponds. Newly hatched fishes are one of these which are rarely collected or examined close at hand. Until recently, professional fishery biologists did not know much about the early life of fishes; interest in early life history studies has risen exponentially during the last few decades. The publication rate of scientific studies in this field has risen from approximately ten titles per year around 1940 to more than fifty per year in the early 1970s. In the 1980s, studies of newly hatched fish will be one of the most active areas in fishery biology.

In this first of four articles about the biology of baby fish, I would like to discuss and present information about their distribution and phenology within our lakes and ponds. In the second article, their external and internal anatomy will be described. Numerous larval fishes from the Ottawa region will be described and illustrated in the third and fourth articles.

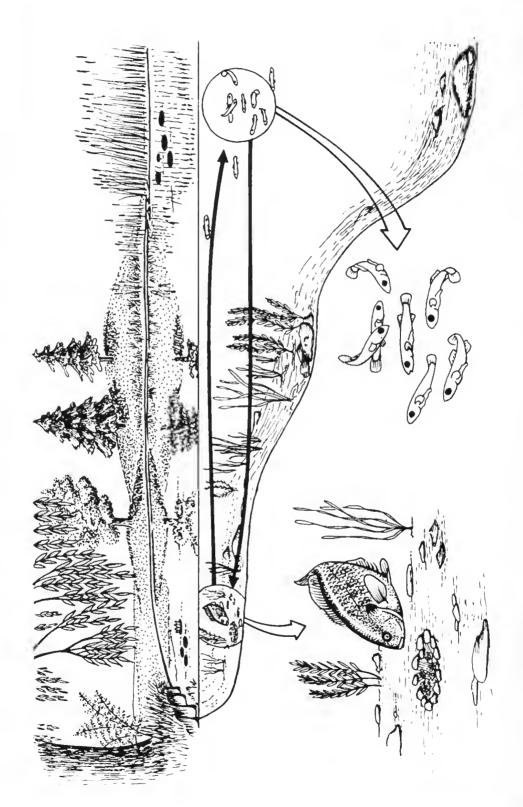
Why is the study of larval fish even of interest? Federal Water Pollution Control Act amendments of 1972 in the United States caused a biological revolution. These amendments required heating plants, generating plants, and any other commercial endeavour using large volumes of water to monitor the young fish and other organisms passing through machinery by entrainment (straining water) methods. The species of fish and their numbers in any water body are closely related to water quality, so surveys of larval fish can be a gauge of pollution. Experiments have shown that both eggs and larvae are more sensitive to the environment than adults; that is, they die quicker when pollution occurs. It has been demonstrated in laboratory studies that excess heavy metals and other pollutants cause spinal abnormalities, curved tails, abnormal development, and generally increased death among baby fish. It is well-known that fishes normally have good and bad years for hatching, so fishery biologists are continually trying to establish relationships between the abundance of eggs and larvae, and the annual

success or failure of yearclasses or annual broods. It is important to know and understand the factors which cause unusual mortalities. And finally, scientific knowledge about the eggs and larvae of fishes can provide insight into our fragile natural resources while at the same time help to document our Canadian natural history heritage.

There is a need to know more about the distribution and occurrence of newly hatched fishes. For example, it is now known that the babies of the common Lake Whitefish and Lake Herring live at the surface of lakes in early spring. Imagine how many of these are killed when a 100 hp outboard motor goes across a lake! All young fish are not found along shorelines, in weedbeds, or even in shallow water. In fact, one reason why so few baby fish are known intimately is because many live in deep water even though they hatched from eggs laid in shallow water. Neither adult nor baby fish live just anywhere, for, like deer, rabbits or warblers, each species lives within a definite habitat within "their" range. Biologists are gradually learning where baby fish live. A thorough knowledge of their whereabouts from egg through larva, juvenile and into adult is known for surprisingly few species. Readers should be reminded that fishes are unique among all vertebrates - no other vertebrate order has its babies occupying so many different habitats and displaying such widely diverse anatomical features. A good book on the early life of a fish is The Angelfish: Its Life Cycle (White and White 1979).

Fishermen normally expect to find Northern Pike near weed beds, Rockbass in shallow rocky areas, Smallmouth Bass along deep rocky shores, and so forth. Such differences in habitat and behaviour show a general tendency for fish (and other animals) to restrict the bulk of their activities to particular portions of their available range. So it is with larval fishes, except that these habitats are usually different from where the adults live. The search for young fishes must not be biased by knowledge of their adult behaviours. The active or passive movement of newly hatched fishes away from places where they are hatched is important. Different species of baby fishes live in different parts of lakes.

Certain species of fish larvae display completely passive behaviour while others show active dispersive movements. At times, passive larvae are carried by wind-driven currents into the offshore weedless region (pelagic or limnetic region), while at other times they remain quiet among shoreline vegetation. On the other hand, it is those species with dispersive swimming movements or innate "wanderlust" that are so difficult to find. Fish larvae which remain within shallow littoral regions possess darker patterns of pigmentation than those that disperse away from shallow waters. One theory says that those larvae restricted to shallow water need the extra pigmentation for protection against normal rays of the sun; those restricted to deep offshore



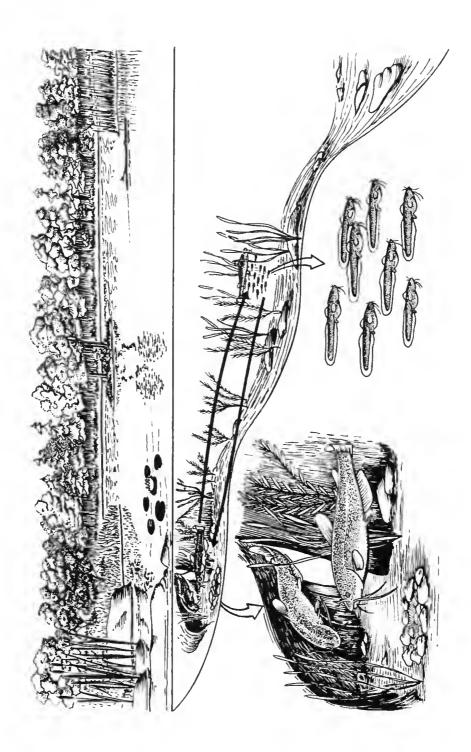
waters can protect themselves without pigmentation by swimming into deeper water where light intensity naturally diminishes. Another theory says that larval fishes adapt to their immediate environment; that is, those living in dark, shady areas develop dark patterns of pigmentation while those living in open, lighted areas do not develop pigmentation.

Dark coloured or shallowwater larvae, which are relatively easy to locate and see, include: pikes (Esocidae), bullheads (Ictaluridae), suckers (Catostomidae), sticklebacks (Gasterosteidae), most minnows (Cyprinidae) and basses (Centrarchidae). Shallowwater larvae will be described in the third article. Light coloured larvae or deepwater larvae, which are usually difficult to see, include: Yellow Perch (Percidae), common sunfishes (Centrarchidae) and Rainbow Smelt (Osmeridae). Several deepwater larvae will be described in the fourth article.

#### Deepwater Larval Fisher

Dispersive movements of certain larval fish display a unique sequence of movements or pattern of migration into the offshore limnetic region. As an example, our common Pumpkinseed Sunfish (Lepomis gibbosus) displays such a sequence. This early life strategy is illustrated in Figure 1 (opposite). Males dig nests in shallow water and keep them clean for incubating fertilized eggs. Pumpkinseed eggs hatch in about two or three days; their light coloured or transparent larvae remain on the nest for an additional three or four days. After their yolks are absorbed, they depart their nests and disperse into deeper limnetic waters. They are about 5 mm long at this time. Live Pumpkinseed larvae are transparent and virtually invisible except for their black eyes. Even their blood is transparent. Gradually, individuals begin to associate together and develop schooling behaviour. Larval Pumpkinseeds remain offshore in deep limnetic regions for a period of two to four weeks, depending upon the temperature regime, hydrographic features of the lake, and probably other factors. At a length of about 20 to 35 mm, all return to shallow weedy regions where they live in schools. As juveniles, at a length of about 50 to 75 mm, they live individually or in loose associations with other Pumpkinseeds in shallow weedy areas.

Figure 1 (opposite): overview of the early life strategy of the Pumpkinseed Sunfish. An adult male protects eggs in a nest (inset, lower left). Almost transparent larvae leave the nest and swim in deep areas in loose aggregations (right, above). A closer look at the larval Pumpkinseed Sunfish is given (centre, below). Illustration by Sally Gadd.



#### Shallowwater Larval Fishes

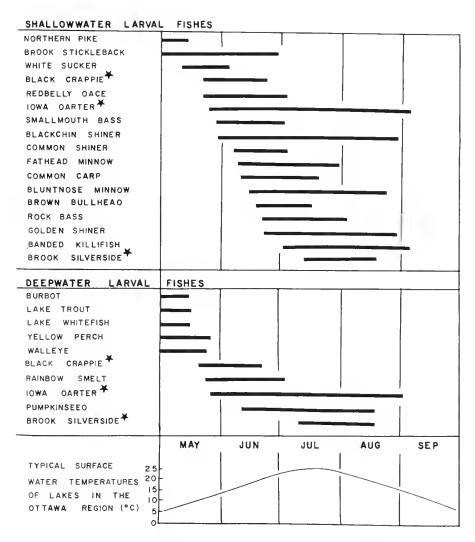
Other kinds of larval fishes remain in shallow water, move much less, and develop strong territorial behaviour. Most of these fishes spawn in shallow water, and their larvae remain there for some considerable time after hatching. Some of these larvae learn to school, for example, Bluntnose Minnow and Brown Bullhead, while others swim around individually, for example, Iowa Darter and Northern Pike. The early life strategy of the Brown Bullhead (Ictalurus nebulosus) is illustrated in Figure 2 (opposite) as an example. A nest, a depression or even a hole, is dug to deposit and retain eggs. Bullhead eggs hatch in a week or so. At hatching time they are partly coloured with yellow carotinoids but begin to darken with melanin pigmentation after a few hours. They remain in the nest for another week while their large, heavy yolk reserves are used up. When the young fish (now in the juvenile stage) are able to swim, they form tight schools and cruise along the shallow shorelines with an adult nearby. They are about 20 mm long at that time and are black or brown in colour. Gradually, individuals begin to break away from the school and disperse on an individual basis.

#### Phenology of Larval Fishes

We have seen where larval fishes live, but when can they be found in those two habitats? In every body of water there is an unseen phenology of larval fish species; that is, various kinds come and go. This succession or seasonal occurrence is, of course, the result of different hatching times. Since the eggs of different species have different incubation periods, actual spawning times are only indirectly related to phenology. Temperature is a controlling factor, and annual changes in the rate of lake warm-up effect fish spawnings. The warm-up of lakes is affected directly by air temperatures; therefore, cool springs delay hatching, whereas warm springs hasten hatching. On the other hand, the sizes of lakes also temper larval fish phenologies. As an example, Yellow Perch larvae occur in May in shallow lakes which warm up quickly, whereas they occur in June in deep lakes which warm up more slowly. Annual differences in phenology are detectable only with a regular field sampling program for fish eggs and larvae.

A calendar of larval fish phenology for several species in the Ottawa-Carleton region is shown in Figure 3. As discussed

Figure 2 (opposite): overview of the early life strategy of the Brown Bullhead. A nest with fertilized eggs is guarded by adults (inset, lower left). Dark coloured juveniles leave the nest and swim in shallow water in tight schools accompanied by an adult (centre, above). A closer look at juvenile Brown Bullheads is given (centre, below). Illustration by Sally Gadd.



\* FOUND IN BOTH SHALLOW WATER AND DEEP WATER HABITATS.

Figure 3: a calendar of larval fish occurrence. The upper species are dark coloured and usually are found in shallow water. The lower species are light coloured or transparent and usually are found in deep water. Horizontal black lines indicate the periods of time when larvae of those species can be expected to be present in ponds and lakes around Ottawa. The range of surface temperatures within which larvae can be found can be determined by extrapolating the beginning and the end of the black horizontal line down to the "typical" surface water temperature curve at the bottom of the figure.

previously, there are two kinds of larval fish living in lakes and ponds, (1) those that live in shallow water among aquatic plants, and (2) those that live in deep water. As a result, this calendar is subdivided into two groups or habitats where different phenologies exist. Although this is not a complete phenological calendar for all possible species, it shows the seasonal occurrence of many common species in our area. Notice the relationship between water temperature and the first appearance of each species. The "harbinger temperature" is the value of the surface temperature of the water when a particular species of larvae is first collected or available to some particular collecting device. Harbinger temperatures are almost unique for each species.

Scientific knowledge about the distribution and phenology of larval fishes is finally becoming available. This knowledge is important for the effective management of sport and commercial fishes and for accurate information of our natural resources. Scientific studies which relate directly to these subjects include the following: Faber (1967, 1980 and 1981), Werner (1969), Amundrud  $et\ al.\ (1974)$  and Cucin and Faber (1984). Our local adult fishes have been documented by McAllister (1968) and McAllister and Coad (1974).

In the next article, the anatomical features of larval fishes will be illustrated, and terminology appropriate to the early life of fishes will be discussed.

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# N.C.C. Programs

- PRESCHOOL PROGRAM a special nature outing for youngsters from 3 to 5 years old accompanied by a parent at the Stony Swamp Interpretation Centre on the first Wednesday of each month from 10 to 11:30 a.m.
  - March 7 The story of the fox and the hare; April 4 The story of maple sugar making.
- LOG FARM It's sugaring off time! From sap to sugar, from Indian mokuks to plastic tubing, join the N.C.C. interpreters to hear the story of maple sugar making.
  - April 7 and 8, at 10 and 11 a.m., 1, 2, 3 and 4 p.m.
  - A nominal fee will be charged at the Log Farm.

# First OFNC Pelee Weekend

Roger Taylor and Bruce M. Di Labio

In recent years, The OFNC has been going further afield on its excursions, and as a result of this trend the first OFNC Pelee weekend was organized to take place in May, 1983. On Friday, May 16, about 40 enthusiastic birdwatchers, including leaders Bruce Di Labio, Roger Taylor and Ron Bedford, took off from the Travelways bus depot at 6:35 a.m. headed for a long weekend of birding at Point Pelee National Park. This unique park, one of the smallest of our national parks, is located on a point extending south into Lake Erie near Windsor. It is the southernmost point in mainland Canada (Pelee Island is further south) and is world-renowned for the annual spring bird migration each May.

Our first major stop (at 4 p.m.) was Hillman's Marsh (formerly Stein's) just a few kilometres down the lake from Pelee. It was a cool, sunny and windy day, and there was very little to be seen other than some very co-operative Yellow Warblers. An hour later we arrived at the interpretive centre for our first look at Pelee. A brief hour and a half stroll around nearby nature trails was enough to whet our appetites for things to come. Highlights included Red-headed Woodpeckers, Blue-gray Gnatcatchers (seen every day), Gray-cheeked Thrush, Connecticut Warbler (seen by one of the leaders), and lots of Northern Cardinals and Indigo Buntings. We finally arrived at our motel in Windsor at about 7:30 p.m.

The same cool, windy, sunny weather persisted on the Saturday. An early breakfast enabled us to get away well before 6 o'clock, permitting us to get to the "Tip" of Point Pelee before all the gulls had taken off. Early morning can be an exciting time of the day because the migrants are frequently moving in large numbers. On this day, a reverse migration was taking place, and many birds were landing in the bushes at the Tip before a final sortie south over the lake. Scarlet Tanagers, Northern Orioles and many of the more common warblers could be seen taking off towards Pelee Island over the gulls and Caspian Terns still assembled on the sand.

After a while, we split into two groups and started to work back towards the interpretive centre, five km to the north. On the way we found hordes of people and many interesting birds, including a Whip-poor-will, White-eyed and Yellow-throated Vireos, Blue-winged and Golden-winged Warblers, a female Cerulean Warbler and more Scarlet Tanagers.

At the interpretive centre we were able to see Orchard Orioles and get a second look at the very co-operative Gray-cheeked

Thrush we saw the day before. He even sang for us as he moved about in the sumac. In the afternoon we added some terrific views of a pair of Prothonotary Warblers, a female Hooded Warbler and a Rufous-sided Towhee. A return to Hillman's Marsh produced the only Great Egret and Oldsquaw of the trip and a fine view of a Golden Plover in the middle of a ploughed field. A pretty tired but satisfied group returned to the motel that evening for a well-appreciated rest.

Sunday dawned gray, very cool and drizzly, hardly an ideal day for birding so it seemed. But Pelee is such an extraordinary place that exciting birds can be found under any weather conditions. We started the day again at the Tip, where we added Surf Scoter and Red-breasted Merganser to the trip list. A few people were privileged to see a Worm-eating Warbler before it vanished from the nearby bushes. As we drifted back north, there was a surge towards the snackbar near the Tip for a hot chocolate and coffee break. Outside the snackbar near the shore's edge, a small, rather nondescript Red Cedar was attracting a lot of attention. For some reason it was just alive with birds and afforded us some excellent looks at seven species of warblers, including a beautiful male Parula.

Continuing on, we again saw both Blue-winged and Golden-winged Warblers and added a Prairie Warbler to the list, as well as a few Eastern Bluebirds. Then came, for some people a special highlight, a rare (in Ontario) Bewick's Wren on the West Beach. Finally, just before lunch, another Connecticut Warbler was seen by three members of the group.

At lunchtime we renewed our acquaintance with our friend, the Gray-cheeked Thrush at the interpretive centre, and then we moved off in the bus to explore other areas in the park on the way to the entrance about five km away. Here we began to appreciate how cool, damp weather in May can enhance a birding excursion. Scarlet Tanagers were visible everywhere as they came low down, away from their normal tree-top habitat, to search for insects. A Hooded Warbler hopped around in plain view under a picnic table. Then, on the nearby beach, we were treated to the extraordinary sight of a female Cerulean Warbler rushing about in the grass, literally at our feet, as it frantically searched for insects. It was thrilling to see these birds so easily and so well, but it was sad and sobering to appreciate that this was possible only because they were so desperately struggling for food. Our final highlights of the day were two excellent views of Yellow-billed Cuckoos. The rusty patches in their wings were clearly evident as they flew low past us on their way north.

On Monday, May 16, we set off on our way home, bypassing Point Pelee and calling in at Rondeau Provincial Park instead. This fascinating park, about an hour's drive from Pelee and also on Lake Erie, features a mature Carolinian forest with many

magnificent trees, amongst which the Tulip Trees were, perhaps, the most impressive. The weather was still cool, but sunny again, and the park was fairly quiet from a bird point of view. However, as we walked along the road running down the east side of the park, the Red-headed Woodpeckers treated us constantly to an excellent show. Rufous-sided Towhees called from several spots and sat out in the open for us. Then came the highlight. Several Yellow-breasted Chats popped up from brushy spots and chattered at us. We all had excellent views of these elusive birds which are very rarely seen in Ottawa. Finally, just before lunch, we strolled around one of the nature trails, admiring the Tulip Trees and looking at the few woodland species (including a White-eyed Vireo) that we could find.

A one o'-clock departure from Rondeau got us home at about 8:30 p.m. A tired but happy group of people tumbled (figurative-ly) off the bus that evening. All agreed that despite the cool weather the trip was well worthwhile. Many are looking forward to the next one. More than 150 species were tallied, a lot of them new to most of the participants. Point Pelee is a very special place and always will be as long as there are birds and as long as we have a national parks system.

As leaders, we really enjoyed the interaction which such an enthusiastic group.  $% \left\{ 1\right\} =\left\{ 1\right\} =\left\{$ 



A glimpse of some of the Ottawa birders at Point Pelee. photographed by Bruce Di Labio.

# OFNC Niagara Birding Trip

#### Blake Maybank

This past November The Ottawa Field-Naturalists' Club organized its first Niagara River birding trip, under the capable leadership of Bruce Di Labio and the efficient administration of Frank Bell. The ornithological objectives of the excursion were to observe the autumnal concentration of gulls and waterfowl along the Niagara River and to search for other species that, in the Ottawa region, are rare or difficult to locate. In light of these objectives, the trip must be considered an unqualified success.

Our voyage did not have an auspicious beginning, however, when, at 5 p.m. on November 9, 14 intrepid birders boarded a cramped short-distance tour bus for the long haul to Niagara Falls. Remarkably, despite the lack of a washroom, reclining seats, luggage racks, reading lights, or an operable temperature control, we were still full of enthusiasm when we arrived at our hotel at 1:40 a.m.

Saturday dawned cloudy but warm. As we stood overlooking the river in front of our hotel deciding where to breakfast, we sighted our first good bird, a Common Black-headed Gull. Everyone had a good look at this bird - indeed, throughout the trip everyone in the party saw each of the memorable species - and many Bonaparte's Gulls were at hand for easy comparison.

After breakfast the rest of the daylight hours were spent exploring the river between Niagara Falls and Niagara-on-the-Lake. We searched in vain above the falls for a Eurasian Wigeon that had been reported, but we did see several thousand Canvasback, a Glaucous Gull, and four Purple Sandpipers. Downstream of the falls, as the day progressed, we sighted a Carolina Wren, several House Finches, and two much-hoped-for Tufted Titmice, the latter birds sighted at a feeder at Niagara-on-the-Lake. The afternoon periods of light drizzle didn't dampen our enthusiasm, and we rounded out the day with a Brant, a White-winged Scoter, a Mockingbird, and excellent close-up looks at several Horned Grebes. We arrived back at the hotel after dark, having seen fifty species.

On Sunday we rose early and ate breakfast before sunrise. The morning was spent in the general area of the falls, searching once again for the Eurasian Wigeon, which others had sighted on Saturday. Again we were unsuccessful, but we were rewarded by a good view of a male Barrow's Goldeneye and by a close-up look at an immature Red-tailed Hawk.



Some of the Ottawa naturalists in Dufferin Park above the falls on Saturday morning. photograph by Bruce Di Labio

Finally, on our third visit to the "Eurasian Wigeon Hotspot" we observed the bird, courtesy of another group which had chanced to see it. Viewing the wigeon was a splendid way to end the Niagara portion of our trip.

On our way back to Ottawa we had sufficient daylight to permit brief stops at Cobourg Harbour and Presqu'ile Provincial Park. At Cobourg we searched unsuccessfully for Harlequin Ducks but saw many Oldsquaw and Mergansers. At Presqu'ile we sighted a very late Black-bellied Plover and a Great Horned Owl.

We arrived back in Ottawa at 9:30 p.m., tired but satisfied. It was an enjoyable, successful excursion; we hope that there will be enough interest and demand that the trip can be undertaken yearly. The cost is reasonable and the birding is great. But perhaps an alternative to the tiny tour bus could be found; rear-ends have long memories.

# Point Pelee Excursion

DATE: May 10 - 13 (inclusive), 1984 LEADERS: Bruce Di Labio and Frank Bell

Your Club, through Travelways, is offering an excursion to Point Pelee to observe birds and whatever else might be of interest. We may also visit Rondeau Park on the first and/or last day(s).

Little need be said to the members of our Club about Point Pelee. This tiny peninsula of marsh, beach and forest is a birding hot-spot and is recognized as one of the most important migratory areas in North America. It is one of the premier birding locations in the world. Probably no other place in North America attracts more naturalists than Point Pelee National Park in the spring. Did you know that more than 300 species of birds have been recorded in the Park, with an impressive total of 250 or more species recorded every spring? During the rush of springtime migration, it is not uncommon to see over 100 species in a single day. Have a look at the article by Roger Taylor and Bruce Di Labio on pages 94 and 95 recounting the highlights of last year's successful trip.

ACCOMODATION will be in the Holiday Inn in Chatham, northeast of the Park. Prices are down from last year and are as follows:

single occupancy (1 single bed) \$230.00 per person twin occupancy (2 single beds) \$175.00 per person triple occupancy (2 double beds) \$150.00 per person quadruple occupancy (2 double beds) \$140.00 per person NOTE THAT THESE PRICES INCLUDE BUS FARE BUT NOT MEALS.

MEALS will be provided at the motel with breakfast tentatively scheduled for 5:00 - 5:30 a.m. and dinner for 6:30 p.m. Box lunches will be provided on Friday, Saturday and Sunday. Meals will be paid for individually; they are not included in the above-quoted costs. You should bring a lunch with you on Thursday.

#### TENTATIVE ITINERARY

Thursday, May 10: leave Ottawa 6:00 a.m., arrive Chatham 3:00 p.m.

Friday and Saturday: breakfast 5:00 - 5:30 a.m. depart for Pelee 5:45 a.m.

depart from Pelee 5:00 - 6:00 p.m. dinner 6:30 p.m.; evening free

- Sunday, May 13: breakfast 6:00 6:30 a.m.; depart 7:00 a.m. two or three hour stopover at Rondeau Park arrive Ottawa 7:00 p.m.
- 1. Reservations should be made as soon as possible by calling the Club number (722-3050). Payment in full must be received by April 1. For full refund, notice of cancellation must be made before April 1. Send your payment for this trip (by cheque or money order payable to The Ottawa Field-Naturalists' Club) to Ellaine Dickson, 2037 Honeywell Avenue, Ottawa K2A OP7. Do not delay in making your reservation. If the bus is not filled by OFNC members, it will be opened to the general public much earlier this year than last.
- 2. Expect to see more people than birds at the Park at this time of the year. Pedestrian traffic is expected to be heavy.
- 3. Binoculars and warm clothing are essential. Rain gear should be taken, but we hope will not be needed.
- 4. The bus is at our disposal; it will stop or go according to our requests.
- 5. If you get the answering service when you call the Club number, please leave your name and phone number, and we will contact you.



O.K. O.K. ONE MORE FOR MYLIFELIST AND 19M READY FOR LUNCH ....

# National Museum Programs

The National Museum of Natural Sciences will present Canadian Nature Art 1983 from March 6 to April 26, 1984. This exhibition of 35 paintings, drawings and prints, sponsored by the Museum and the Canadian Nature Federation, is at the last stop of a cross-Canada tour.

On March 18, at 2 p.m. in the Auditorium, there will be an Audubon Wildlife Film, Summer in Kiwi Land, in English. There will be interpretation for those with impaired hearing.

# Natural History Workshops at Carleton University

The Department of Biology at Carleton University, in cooperation with the School of Continuing Education, has launched
a series of workshops in natural history for interested people
in the Ottawa area. Based in the new Natural History Centre in
the Tory Building at Carleton, the series will consist of modules
designed to reflect the changing seasons. The modules will present the significance and relationships of the living world
around us through discussions and outdoor workshops. The coming
modules are described below.

Spring Birds - Welcome the Migrants

This spring workshop, consisting of lab and field work, will be held April 25 to 27. At that time, the waterfowl and shorebirds are arriving in large numbers, and trips are planned to take advantage of these arrivals as study material of migration and bird behaviour. Leaders: Dr. V.E.F. Solman and A.G. Loughrey. Course fee: \$70.

Spring in the Valley

Getting out to sample the activity of the living world in spring is almost an annual ritual of renewal. The workshop lasts from May 22 to 27, visiting many outstanding natural areas in the Ottawa Valley. Field activities are supplemented with lab discussions, films, slides, and an opportunity to reaffirm identifications through checking with the animal and plant collections at the Centre. Leaders: Dr. I.L. Bayly and S. Wendt. Course fee: \$125.

Enrolment is limited to 15 participants per workshop. Transportation is provided. Registration is with the School of Continuing Education, Room 302, Administration Building, Carleton University, Ottawa K1S 5B6. For further information, call 231-6660.

# omine Events

arranged by the Excursions and Lectures Committee Philip Martin (729-3218), Chairman

Times stated for excursions are departure times. Please arrive earlier; leaders start promptly. If you need a ride, don't hesitate to ask the leader.

Date and time to be Leader: Stephen Darbyshire (749-9317)

AMPHIBIANS IN SPRING

Meet: to be decided

decided

The success of this outing is very dependent on weather. If you wish to participate, telephone the Club number (722-3050) before March 10. When a date and meeting place for the outing have been fixed, you will be notified by telephone. Last year, to accomodate more people, Stephen ran the excursion twice, and it is likely that he will do so again this year. Bring a strong flashlight and a longhandled dip net; wear rubber boots and warm clothes.

Saturday 10 March MADAWASKA WILDERNESS SKI TRIP FOR INTERMEDIATE-ABILITY CROSS COUNTRY SKIERS

Leaders: Sheila and Harry Thomson (234-0845) This will be an all-day outing. Participants need not be long distance marathoners. It is probable that the participants will split into two groups, one of which will cover five to six km, and the other about 15 km. Come and enjoy the day exploring a winter wilderness. (See the report of last year's outing in Trail & Landscape 17(3): 184-185.) To register and obtain further details, telephone the leaders by Wednesday, March 7.

Saturday 10 March 8:00 a.m. LATE WINTER BIRDS AND EARLY SPRING MIGRANTS Leader: Tom Hanrahan (230-5290)

Meet: Loblaws, Carlingwood Shopping Centre, Carling Avenue at Woodroffe Avenue Dress warmly and wear waterproof footwear; binoculars are essential. This will be a half-day outing. Highlights might include Snowy Owls, winter hawks and Pine Grosbeaks.

Tuesday OFNC MONTHLY MEETING

13 March A TRIP TO NORTHERN ELLESMERE ISLAND

8:00 p.m. Speaker: Roy Hamaguchi

Meet: Auditorium, National Museum of Natural
Sciences, Metcalfe and McLeod Streets
A photographic journey to the northern tip of
Canada's most northerly land mass will be presented.
An arctic desert, this unique and remote area is
being considered for a national park. The slides
will show the flora, fauna, unique habitats and
historic sites. Those who enjoyed Roy's previous
presentation on his solo trek across Auyuittuq
National Park on Baffin Island will particularly

not want to miss this talk.

Friday
23 March
7:15 p.m.

EARLY SPRING OWLING AFTER DARK Leader: Bruce Di Labio (729-6267)

Meet: Neatby Building, Central Experimental Farm, one block west of the Irving Place - Maple Drive stoplight on Carling Avenue. Use the parking lot west of the Neatby Building and

south of the greenhouses.

Take advantage of this field workshop to learn the diagnostic "hoots" of the owls and the "songs" of some other nocturnal birds. There should be a good chance to hear Great Horned, Barred, Saw-whet and, perhaps, Long-eared Owls. If weather appears unfavourable, telephone the leader to confirm whether or not the outing will take place as scheduled. If the weather and the birds are cooperative, the outing might last until about midnight, earlier otherwise. This outing will be repeated on April 11.

Sunday 1 April 6:30 a.m. BUS EXCURSION: BIRDING AT PRESQU'ILE

Leaders: Bruce Di Labio (729-6267) and Bob Bracken

(728 - 3495)

Meet: Loblaws, Carlingwood Shopping Centre, Carling Avenue at Woodroffe Avenue

Cost: \$18.00 per person (prepaid ten days in ad-

vance)

This popular outing has become a spring tradition. The large flocks of waterfowl gathered at the provincial park prior to migrating further north will highlight the trip. Bring enough food for this all-day excursion. Dress warmly and wear waterproof footwear. Bring binoculars or, better still, a telescope. Make your reservation by sending a cheque or money order (payable to The Ottawa Field-Naturalists' Club) to Ellaine Dickson, 2037 Honey-

well Avenue, Ottawa K2A OP7, at least ten days in advance. Include your name, address, telephone number and the name of the outing.

Tuesday

OFNC MONTHLY MEETING

10 April

VISITS TO KRUGER NATIONAL PARK

8:00 p.m. Speakers: Bea Boyes and Philip Martin
Meet: Auditorium, National Museum of Natural
Sciences, Metcalfe and McLeod Streets
Bea and Philip will be showing you their photographic
record of visits to the park while they were working
at University College in Swaziland. The park, located in eastern South Africa adjacent to Swaziland, is
350 km long and 70 km wide. Its savannas provide
shelter for such animals as elephants, zebras, wildebeestes and lions, as well as for many birds.

Wednesday 11 April 7:45 p.m. EARLY SPRING OWLING AFTER DARK Leader: Bruce Di Labio (729-6267)

Meet: Neatby Building, Central Experimental Farm. Refer to the 23 March outing on the opposite page for further details.

Sunday 29 April 6:30 a.m. BUS EXCURSION: HAWK MIGRATION AT DERBY HILL, N.Y. Leaders: Bruce Di Labio (729-6267) and Steve O'Donnell (729-1554)

Meet: Loblaws, Carlingwood Shopping Centre Carling Avenue at Woodroffe Avenue

Cost: \$18.00 per person (prepaid ten days in ad-

vance)

When weather conditions and timing are favourable, the hawk migration through Derby Hill is a spectacle well worth the long bus trip. Bring enough food for this all-day outing. Dress warmly and wear waterproof footwear. Binoculars are a must. Canadians should bring proof of citizenship and non-Canadians should carry passports. Binoculars, cameras and other equipment in "new" condition should be registered with Canada Customs (Port of Ottawa, 360 Coventry Road; Port of Hull, Place du Portage Phase II COMM Level 1) in advance of the trip. Make your reservation by mailing your cheque or money order (payable to The Ottawa Field-Naturalists' Club) to Ellaine Dickson, 2037 Honeywell Avenue, Ottawa K2A OP7, at least ten days in advance. Include your name, address, telephone number and the name of the trip. If the weather forecast on the day previous to the excursion is particularly unfavourable, the trip will be cancelled. The decision to cancel last year's trip was a wise one because only one or two hawks put in an appearance. If the weather forecast for the eastern end of Lake Ontario (telephone 998-3440) is poor and you can not be reached by phone on the 28th, please telephone one of the leaders to confirm the status of the trip.

Friday 4 May OFNC SOIREE

4 May 7:30 p.m.

Meet: Unitarian Church Hall, 30 Cleary Street See the centrefold for additional details.

Saturday 5 May BIRD WALK FOR BEGINNERS Leader: to be decided

5 May 7:30 a.m.

Meet: Britannia Drive-In Theatre, Carling Avenue This is the first of a series of three or four Saturday morning walks for novice birders to be offered in May. Binoculars are essential, and insect repellent and waterproof footwear are advisable.



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